



ANSWER 1 OF 1 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2002:98830 CAPLUS Full-text

DN 136:153128

ED Entered STN: 06 Feb 2002

TI Production method and apparatus for industrial cleaning agent and cleaning

method using the agent

IN Sotoe, Hiroshi; Narita, Akira

PA Kros Y. K., Japan; Star Tack K. K.

SO Japan Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2002038195

A

20020206

JP 2000-226433

20000727 <--

PRAI JP 2000-226433

20000727

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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JP 2002038195

IPCI

C11D0007-26 [ICM,7]; C11D0007-22 [ICM,7,C\*];  
B08B0003-08 [ICS,7]; C02F0001-46 [ICS,7];

C02F0005-00

[ICS,7]; C11D0007-60 [ICS,7]; C11D0011-00

[ICS,7];

C11D0017-08 [ICS,7]; C23G0001-02 [ICS,7];

C25B0001-04

[ICS,7]; C25B0001-00 [ICS,7,C\*]; H01L0021-304

[ICS,7];

H01L0021-02 [ICS,7,C\*]

IPCR

B08B0003-08 [I,C\*]; B08B0003-08 [I,A];

C02F0001-46

[I,C\*]; C02F0001-46 [I,A]; C02F0005-00 [I,C\*];  
C02F0005-00 [I,A]; C11D0007-22 [I,C\*];

C11D0007-26

[I,A]; C11D0007-60 [I,C\*]; C11D0007-60 [I,A];  
C11D0011-00 [I,C\*]; C11D0011-00 [I,A];

C11D0017-08

[I,C\*]; C11D0017-08 [I,A]; C23G0001-02 [I,C\*];  
C23G0001-02 [I,A]; C25B0001-00 [I,C\*];

C25B0001-04

[I,A]; H01L0021-02 [I,C\*]; H01L0021-304 [I,A]

AB The cleaning agent is an electrolytic water comprises auxiliary agent selected from citric acid, ascorbic acid, oxalic acid, acetic acid, formic acid, and glycolic acid, wherein the agent is directly contacting with target material for cleaning purpose. An illustration on the cleaning apparatus and process is given.

ANSWER 1 OF 1 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN  
AN 2002-376219 [200241] WPIX Full-text  
DNC C2002-106556 [200241]  
DNN N2002-294107 [200241]  
TI Washing agent for industrial use, comprises electrolyzed water  
with  
electrolysis adjuvant chosen from citric acid, ascorbic acid,  
oxalic acid,  
acetic acid, formic acid and glycolic acid  
DC D25; P43; U11  
IN NARITA A; SOTOE K  
PA (KURO-N) KUROSU YG; (STAR-N) STARTACK KK  
CYC 1  
PI JP 2002038195 A 20020206 (200241)\* JA 8[3]  
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ADT JP 2000-226433 20000727  
PRAI JP 2000-226433 20000727  
IPCR B08B0003-08 [I,A]; B08B0003-08 [I,C]; C02F0001-46 [I,A]; C02F0001-  
46  
[I,C]; C02F0005-00 [I,A]; C02F0005-00 [I,C]; C11D0011-00 [I,A];  
C11D0011-00 [I,C]; C11D0017-08 [I,A]; C11D0017-08 [I,C]; C11D0007-  
22  
[I,C]; C11D0007-26 [I,A]; C11D0007-60 [I,A]; C11D0007-60 [I,C];  
C23G0001-02 [I,A]; C23G0001-02 [I,C]; C25B0001-00 [I,C]; C25B0001-  
04  
[I,A]; H01L0021-02 [I,C]; H01L0021-304 [I,A]  
FCL B08B0003-08 Z; C02F0001-46 A; C02F0005-00 610 H; C02F0005-00 620 B;  
C02F0005-00 620 C; C02F0005-00 620 D; C11D0011-00; C11D0017-08;  
C11D0007-26; C11D0007-60; C23G0001-02; C25B0001-04; H01L0021-304  
622 Q  
FTRM 3B201; 4D045; 4D061; 4H003; 4K021; 4K053; 5F057; 4K021/AA01;  
3B201/AA03;  
3B201/AA13; 4K021/AB25; 3B201/AB51; 4K021/BA02; 4H003/BA12;  
4K021/BA19;  
3B201/BB05; 3B201/BB21; 3B201/BB88; 3B201/BB89; 3B201/BB90;  
3B201/BB92;  
3B201/BB93; 3B201/BB96; 4H003/CA15; 3B201/CC21; 4D061/DA03;  
4H003/DA09;  
4K021/DA09; 4H003/DA15; 4K021/DB05; 4D061/DB07; 4K021/DB12;  
4K021/DB18;  
4K021/DB28; 4H003/DC04; 4K021/DC15; 4D061/EA02; 4D061/EB01;  
4D061/EB04;  
4H003/EB07; 4H003/EB08; 4D061/EB12; 4D061/EB14; 4D061/EB37;  
4D061/EB39;  
4D061/EC01; 4D061/EC02; 4H003/ED02; 4D061/ED12; 4H003/FA01;  
4H003/FA03;  
4D061/GA22; 4D061/GA23; 4D061/GC02; 4K053/PA06; 4K053/QA01;  
4K053/RA07;  
4K053/RA45; 4K053/RA46; 4K053/RA47; 4K053/RA48; 4K053/SA05;  
4K053/TA15;  
4K053/YA11  
AB JP 2002038195 A UPAB: 20050525  
NOVELTY - Washing agent comprises electrolyzed water and an  
electrolysis adjuvant chosen from citric acid, ascorbic acid,  
oxalic acid, acetic acid, formic acid and/or glycolic acid. The  
electrolyzed water is obtained by applying a voltage to water.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (i) Manufacturing method of washing agent;
- (ii) Manufacturing apparatus of washing agent;
- (iii) Cleaning method using the washing agent.

USE - For industrial use.

ADVANTAGE - Use of the washing agent is safe, which offers high washing capability.

DESCRIPTION OF DRAWINGS - The figure shows the explanatory view of manufacturing apparatus for washing agent.

- tank (1)
- Anode (2)
- Cathode (3)
- Electric power device (4)
- Diaphragm (6)

TECH INORGANIC CHEMISTRY - Preferred Process: After adding citric acid to pure

water, the electrolyzed water is added.

FS CPI; GMPI; EPI

MC CPI: D11-B

EPI: U11-C06A1A

## PATENT ABSTRACTS OF JAPAN

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C02F 1/46

C02F 5/00

C11D 7/60

C11D 11/00

C11D 17/08

C23G 1/02

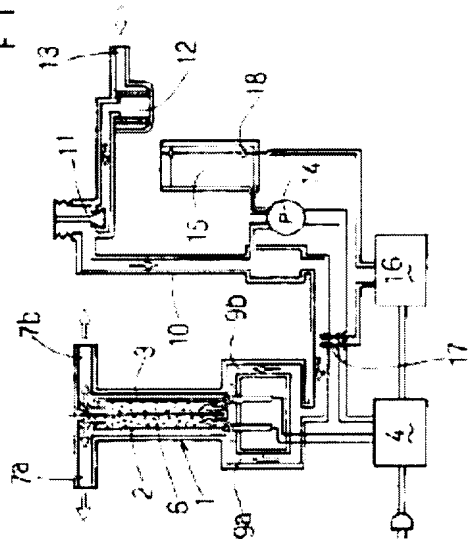
C25B 1/04

H01L 21/304

(21)Application number : **2000-226433** (71)Applicant : **CLOSS CO LTD**  
**STARTACK KK**

(22)Date of filing : **27.07.2000** (72)Inventor : **SOTOE KOJI**  
**NARITA AKIRA**

**(54) CLEANING AGENT, METHOD FOR PRODUCING THE CLEANING AGENT, APPARATUS FOR PRODUCING THE CLEANING AGENT AND CLEANING METHOD USING THE CLEANING AGENT**



(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide an industrial cleaning agent having high safety and excellent in cleaning performance.

**SOLUTION:** The cleaning agent contains an electrolytic water obtained by applying voltage on pure water after adding citric acid using an electrolytic auxiliary adding device 15. Thus, troubles regarding the safety to human body are completely removed, and especially in the cleaning of a polishing apparatus for semiconductor or the like in which mixing of metallic ion (alkali metal) is extremely disadvantageous, an influence of such pollutant is completely removed, and further, high cleaning performance is acquired.